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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/564,593

**Applicant(s)**

SANKEY ET AL.

**Examiner**

ERIK KASHNIKOV

**Art Unit**

1794

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28, 31 and 33-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28, 31 and 33-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 23 and 41-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically claim 23 is rejected for the statement "wherein the unperforated layer and/or substrate layer are as set out in claims 2, 3, 11, or 12" given that the scope of the claim is confusing given that claims 2, 3, 11, or 12 are each drawn to film not unperforated layer and/or substrate layer.

***Claim Rejections - 35 USC § 103***

4. Claims 1-5, 8-10, 12-15, 20-24, 27, 36, 41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175).
5. In regards to claims 1, 3, 4, 9, 10, 22, and 41 Akao teaches a laminate sheet used in packaging (column 1 lines 5-7). Akao teaches a laminate of a thermoplastic resin and a flexible sheet (column 1 line 65 column 2 line1). Akao teaches that one of the layers is perforated (column 2 lines 32-35). Akao teaches that the perforated layer has a degree of perforation of 10-90% (column 3 lines 33-39). Akao teaches that the

diameter of the perforations be between 0.5-25mm (column 3 lines 55-60). In regards to the barrier layer, Akao teaches polypropylene and PET as materials that can be used as the barrier layer (column 4 lines 10 and 14). Akao teaches that the barrier layer be 15-120 microns (column 5 lines 30-33). While the lower end of the range is above Applicant's, Akao disclose the use of 15 micron films, while the present claims require films of about 12 microns. It is apparent, however, that the instantly claimed amount of about 12 and that taught by Akao are so close to each other that the fact pattern is similar to the one in In re Woodruff, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims patentable" or, alternatively, that "a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties".

In light of the case law cited above and given that there is only a "slight" difference between the amount of 15 microns disclosed by Akao and the amount disclosed in the present claims, it therefore would have been obvious to one of ordinary skill in the art that the amount of about 12 microns disclosed in the present claims is but an obvious variant of the amounts disclosed in (reference name), and thereby one of ordinary skill in the art would have arrived at the claimed invention. In regards to the methods Akao teaches methods for making the films in the examples, starting in column

9. Since Akao teaches the same materials used in the same manner as applicants the breathability of the sheet is intrinsic.

6. In regards to claims 2, 20, 21 and 23 since Akao teaches the same materials used in the barrier layer, the properties would be intrinsic.

7. In regards to claim 5 Akao teaches that the flexible layer, herein the barrier layer, is disposed on at least one side of the substrate layer (column 1 lines 35-49).

In regards to claim 8, since Akao teaches perforation diameters and rates which overlap with those presently claimed (as discussed above) it has been found that absent a showing of criticality with respect to "perforations per (25mm)<sup>2</sup>" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "perforations per (25)mm<sup>2</sup>" through routine experimentation to values, including those presently claimed in order to achieve "a packaging film with the appropriate amount of vents to control the moisture and gas barrier properties" (column 1 lines 25-30). It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In regards to claims 12, 13 and 43 Akao teaches that the perforated layer (substrate layer) may comprise PET (column 2 lines 25-30).

8. In regards to claim 14 Akao as previously stated teach that the substrate layer may be a polyester layer, which is also an example given by Akao for a heat sealable layer. Therefore the substrate layer could also act as a heat sealable layer (column 7 lines 50-65).

9. In regards to claim 15 this is just a duplication of parts (See MPEP 2144.04 VI) since Akao has previously stated that polyesters can be used as both a heat seal layer and the substrate layer. The courts have held that mere duplication of parts has no patentable significance unless it results in a new and unexpected result.
10. In regards to claim 24 Akao teaches that the unperforated layer is laminated to the perforated layer (column 9 lines 35-50).
11. In regards to claim 27 Akao teaches that films are formed by extrusion coating (column 9 lines 37-42).
12. In regards to claim 36 Akao et al. teach that the film may be formed into a container (column 12 lines 1-17). In regards to the limitation that the package is for an ovenable meal, since the package is made of the same materials in the same way it would inherently be suitable for an ovenable meal.
13. Claims 1-10, 12-15, 20-24, 27, 28, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Akao (US 4,661,401).
14. As taught above Akao 175 teaches films for use in packaging which has a perforated layer laminated to an unperforated layer, but however is silent regarding the lower range of thickness of Applicant's invention.
15. Akao 401 also teaches films used for packaging.
16. In regards to claims 1, 6, 7 and 28 Akao 401 teaches the use of L-LDPE as an outer layer (401 column 3 lines 48-67), a compound also taught by Akao 175 as useful

for an outer layer (175 column 4 lines 1-17). Akao 401 teaches these layers can be 5-120 microns thick, which overlaps with Applicant's ranges (401 column 4 lines 38-41).

17. All other limitations of the other claims have been discussed above.

18. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Akao175 with that of Akao 401 because Akao 175 which offers reduction in weight of packages as well as prevention in breakage of packages (175 column 1 lines 25-30) would benefit from the improved resistance to impact without reduction of cushioning of Akao 401 (401 column lines 15-20).

19. Claims 11 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Rogers (US 4,918,156).

20. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding using copolyesterether as the substrate.

21. Rogers teaches polyester resins which offer improved processability during manufacture (column 1 lines 5-6).

22. Rogers teaches that this polyester is a copolyesterether formed from 1,4-cyclohexanedimethanol (column 1 lines 5-10).

23. One of ordinary skill in the art at the time of the invention would be motivated to modify the package of Akao with the polyester of Rogers, because the polyester of Rogers offers improved processability during manufacture (column 1 lines 5-10) and a decrease in film splitting (column 2 lines 49-50).

24. Claims 16, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Dominguez De Walter et al. (US 6,787,630 and hereinafter Dominguez).
25. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding the heat sealable layer comprising ethylene glycol, terephthalic and isophthalic acid.
26. Dominguez teaches heat stable polyesters which are easily reproduced (column 1 lines 7-10).
27. In regards to claim 16 Dominguez teaches copolyesters derived from ethylene glycol, and terephthalic and isophthalic acid (column 13 lines 1-10). In regards to the concentrations it has been found that absent a showing of criticality with respect to "acid ratios" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "acid ratios" through routine experimentation to values, including those presently claimed in order to achieve "polyesters with good color, and reduced degradation". It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).
28. One of ordinary skill in the art at the time of the invention would be motivated to modify the package of Akao with the copolyester of Dominguez because the copolyester of Dominguez offers outstanding clarity and coloring neutrality (column 1 lines 15-16).



29. Claims 17, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of McConnell et al. (US 4,450,250).

30. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding a copolyester derived from ethylene glycol, terephthalic acid and cyclohexanedimethanol.

31. McConnell et al. teach adhesive polymers.

32. In regards to claim 17 McConnell et al. teach a known adhesive polymer which is derived from ethylene glycol, terephthalic acid as well as 1,4-cyclohexanedimethanol (column 3 lines 51-60).

33. One of ordinary skill in the art at the time of the invention would be motivated to modify the film of Akao with the polyester adhesive of McConnell et al. because the adhesive composition of McConnell et al. which is well known in the art offers an ability to bind to a wide variety of materials as well as offering good cohesive and bond strengths and improved processing characteristics (column 1 lines 11 and 18-23).

34. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao. (US 4,587,175) in view of Harrington (US 4,172,824).

35. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding a specific heat seal composition comprising an aromatic dicarboxylic acid, and aliphatic dicarboxylic acid and a glycol.

In regards to claims 18 and 19 Harrington et al. teach a hot melt adhesive compound which comprises terephthalic acid and adipic acid and the glycol component is ethylene glycol (column 2 lines 20-30). Harrington et al. disclose the use of about 60% aromatic dicarboxylic, while the present claims require 55% aromatic dicarboxylic.

It is apparent, however, that the instantly claimed amount of 55% and that taught by Harrington et al. are so close to each other that the fact pattern is similar to the one in In re Woodruff, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims patentable" or, alternatively, that "a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties".

In light of the case law cited above and given that there is only a "slight" difference between the amount of about 60% disclosed by Harrington and the amount disclosed in the present claims, it therefore would have been obvious to one of ordinary skill in the art that the amount of 55% disclosed in the present claims is but an obvious variant of the amounts disclosed in Harrington et al., and thereby one of ordinary skill in the art would have arrived at the claimed invention.

36. One of ordinary skill in the art at the time of the invention would be motivated to modify the film of Akao with the polyester component of Harrington et al. because the

polyester component of Harrington et al. offers an excellent softening points and inherent viscosities (column 2 lines 22-33).

37. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Wang et al. (6,143,818).

38. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding the method of applying the adhesive and using EVOH as an adhesive.

39. In regards to claim 25 Wang et al. teach spray melt blown methods as common methods for applying adhesives (column 1 lines 50-57).

40. In regards to claim 26 Wang et al. teach an adhesive which comprises ethylene vinyl alcohol (claim 11).

41. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Akao et al. with the adhesive of Wang et al. because the adhesives of Wang et al. offer improved cohesive strength as well as excellent heat stability (column 3 lines 20-27).

42. Claims 31, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Zobel (US 5,832,699).

43. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding cut plants being included in the container.

44. Zobel teaches films which comprise a perforated layer (column 4 lines 1-20).
45. In regards to claims 31 34 and 35 Zobel et al. teach that it is known in the art that films with perforations are used to store vegetables, which are cut plant material (column 3 lines 55-63).
46. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Akao with that of Zobel et al. because the invention of Zobel et al. offers an ability to regulate a changing atmosphere in a package (column 1 lines 17-30).
47. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akao (US 4,587,175) in view of Varriano-Martson (US 6,441,340 hereinafter Varriano).
48. As stated above Akao teaches films for use in packaging as well as methods for making said films, but however is silent regarding the film being used as a lid for a package.
49. In regards to claim 33 Varriano teaches containers with lids made from breathable films (column 18 lines 36-50).
50. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Akao with that of Varriano because the invention of Akao would benefit from the modifying or controlling flow of oxygen and carbon dioxide in and out of a container (column 1 lines 14-20).

***Response to Arguments***

51. Applicant's arguments, see arguments, filed 01/05/09 and 03/20/09, with respect to the objection of the oath have been fully considered and are persuasive. The objection of the oath has been withdrawn.

52. Applicant's arguments, see arguments, filed 01/05/09, with respect to the objection of the claims have been fully considered and are persuasive. The objection of the claims has been withdrawn.

53. Applicant's arguments, see arguments, filed 01/05/09, with respect to the 35 U.S.C. 112 2<sup>nd</sup> paragraph rejection of the claims 1-11, 24-28, 30 and 32-36 have been fully considered and are persuasive. The objection of these claims has been withdrawn.

54. In regards to Applicant's arguments regarding the 112 2<sup>nd</sup> rejection of claim 23 the rejection stems from the fact that the claim refers back to a claim that is drawn to a film and not a barrier layer, Examiner suggest rewording the claim as "wherein the unperforated barrier layer of the film is as set out in claim 2".

55. In regards to Applicants arguments regarding the breathability of the package, specifically with regards to the thickness it is noted that "the arguments of counsel cannot take the place of evidence in the record", *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965). It is the examiner's position that the arguments provided by the applicant regarding breathability must be supported by a declaration or affidavit. As set forth in MPEP 716.02(g), "the reason for requiring evidence in a declaration or affidavit form is to obtain the assurances that any statements or representations made are correct, as provided by 35 U.S.C. 24 and 18 U.S.C. 1001". Applicant has not

presented any data which would show that 15 microns would offer significantly different breathability than 12 microns. In regards to the perforations, Examiner points out that no where in the claims are the perforations required to be unfilled, further Examiner points out that the adhesive layer of Akao et al. is not the barrier layer. Further as the attached reference shows PET films, as used by Akao are by themselves, including embodiments without perforations, breathable, or as defined by Applicant the films do allow for the passage of water. Examiner has included the Hirata et al. (US 4,370,368) specifically table 1 to show that PET films do allow for the transmission of water. It is further pointed out that as these laminate sheets are used to control moisture proofness and gas barrier properties, this statement does not mean that the laminates ensure moisture proofness and barrier properties against gases, but rather can be manipulated and controlled by these films. Examiner further points out that fact that the articles that are packaged by Akao were previously packaged by sealed metal films does not mean that the film used to package them now lacks breathability. As Akao makes no mention of the desire of his film to inhibit the passing of water from one side of the film to the other it can not be said that Akao teaches away from the current invention.

56. In response to applicant's argument that Akao et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Akao and the instant invention are drawn to films used to package articles,

which is the field of endeavor, the breathability of the package would be the problem addressed, and as such is not required to be the same.

57. In regards to Applicant's arguments regarding the Akao 401 reference Examiner notes that while Akao 401 does not disclose all the features of the present claimed invention, Akao 401 is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, and in combination with the primary reference, discloses the presently claimed invention. If the secondary reference contained all the features of the present claimed invention, it would be identical to the present claimed invention, and there would be no need for secondary references. Specifically Akao 401 is being used to teach the required thickness for the L-LDPE outer layer. In regards to Applicant's argument regarding the motivation Examiner points out that reduction of weight was also a motivational reason to modify Akao 175.

### ***Conclusion***

58. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIK KASHNIKOW whose telephone number is (571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (Second Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erik Kashnikow  
Examiner  
Art Unit 1794

/Rena L. Dye/  
Supervisory Patent Examiner, Art Unit 1794

